

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 13-21 and 24-29 are pending in the application, with claims 13, 24, 28 and 29 being the independent claims. Claims 22-23 are sought to be canceled, and claims 1-12 have been previously cancelled, without prejudice to or disclaimer of the subject matter therein. Claims 13 and 28 are sought to be amended. Applicant reserves the right to prosecute similar or broader claims, with respect to the cancelled and amended claims, in the future. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding rejections and that they be withdrawn.

Examiner Interviews of November 5, 2009

Applicant wishes to thank Examiner Rajiv J. Raj and Primary Examiner Vivek Koppikar for the courtesies extended during two telephone interviews with Applicant's representatives, Jason Eisenberg and Anbar Khal, on November 10, 2009. The claim rejections and proposed amendments were discussed. In particular, the distinguishing features set forth in the independent claims 24 and 29 and dependent claims 22 and 23 were discussed in view of the applied references. During the interviews, the Examiners agreed that the rejections of claims 22, 23, 24, and 29 in view of U.S. Published Patent Application No. 2002/0082868 A1 to Pories *et al.* ("Pories") would most likely be removed in view of the proposed amendments and arguments presented, e.g., that dependent claims 22 and 23 and independent claims 24 and 29 contained allowable subject matter. The Examiners also indicated that reconsideration of the application will be given upon filing of an RCE and an updated search.

Rejection under 35 U.S.C. § 103

Claims 13-29 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 5,823,948 to Ross, Jr. *et al.* ("Ross") in view of U.S. Published Patent Application No. 2002/0082868 A1 to Pories *et al.* ("Pories"). Applicant respectfully traverses the rejection, and the Response to Arguments section at pages 16-18 of the Final Office Action ("Office Action").

Without acquiescing to the propriety of the rejection, claims 22-23 have been cancelled, rendering the rejection of these claims moot. Also, without acquiescing to the propriety of the rejection, claims 13 and 28 have been amended to include the allowable subject matter, as indicated during the Interviews, recited in previously pending claims 22-23.

Independent claims 13 and 28

Independent claims 13 and 28 recite features that distinguish over the applied references. For example, claim 13 recites:

displaying, using a processing device, standard patient-language cardinal symptoms on an interface of a display device as one of a selection item and a check item of a chief complaint field of a medical record; and

using an input device to select or check one of the standard patient-language cardinal symptoms to enter the selected patient-language cardinal symptom in the chief complaint field so as to generate a new medical record that identifies the selected patient-language cardinal symptom as a chief complaint,

wherein the standard patient-language cardinal symptoms are selected extracted patient-language terms used in existing medical records of patients regarding cardinal symptoms of the patients, and

wherein the standard patient-language cardinal symptoms are accessed from a database which stores the standard patient-language cardinal symptoms so as to be free from association with any particular medical record,

wherein the standard patient-language cardinal symptoms are mapped to standard codes,

wherein the mapping comprises

imparting a concept identifier of a standard code to each of the standard patient-language cardinal symptoms, and

classifying each of the mapped patient-language cardinal symptoms according to whether a concept of the patient-language cardinal symptom exactly matches or substantially matches the imparted concept identifier of the standard code.

Claim 28 recites similar distinguishing features as claim 13, using respective language.

1. The Applied References Lack The Claimed Displaying and Using an Input Device

As discussed during the above-mentioned Interviews, Ross and Pories, either alone or in an allegedly obvious combination, do not disclose displaying standard *patient-language cardinal symptoms* on an interface of a display device *as one of a selection item and a check item* of a chief complaint field of a medical record and *using an input device to select or check one of the standard patient-language cardinal symptoms* to enter the selected patient-language cardinal symptom in the chief complaint field, as recited in claims 13 and 28.

In contrast to at least this distinguishing feature of the claims, although Ross discloses a "Complaints Module" in which complaints are entered (see col. 8, line 55 - col. col. 9, line 19), Ross does not disclose the entered complaints as being the claimed "*chief complaints*," e.g., a first case history *that a patient states* and is a primary reason why the patient desires a medical service.¹ Further, Ross does not disclose that the complaints are entered by the claimed "using an input device to select or check one of the standard patient-language cardinal symptoms"(as recited in claim 13), or "selecting or checking one of the patient-language terms" (as recited in claim 28).

Moreover, there is no suggestion in Pories that the lexicon includes standard *patient-language* cardinal symptoms, or that the patient's chief complaint is entered in a medical record by *selecting or checking one of* the standard patient-language cardinal symptoms, as provided in claims 13 and 28. Pories merely teaches a clinical lexicon is

¹ See, e.g., the present application at page 3, lines 30-34 ("[A] chief complaint (hereinafter referred to as cardinal symptom) is a first case history *that a patient states* and is a primary reason why the patient desires a medical service. The chief complaint is represented similarly to terms *used by the patient*.)

built by extracting terms from "medical texts and articles" and also from third party data sources, which include "databases maintained by hospitals." Pories does not disclose that the extracted terms are terms "regarding cardinal symptoms of patients," as recited in claims 13 and 28.

Moreover, in Pories, the chief complaint field is completed by **inputting** the patient's chief complaint *in text form*. For example, in Pories the patient's chief complaint may be obtained from the patient during registration and subsequently displayed to the doctor during the patient's encounter with the doctor. Pories does not teach or suggest patient-language cardinal symptoms being displayed as **selectable items** for the *chief complaint field* of the medical record, or that one of the displayed patient-language cardinal symptoms can be **selected or checked** to enter the selected patient-language cardinal symptom in the chief complaint field, as recited in claims 13 and 28.

Therefore, the applied references cannot be used to establish a prima facie case of obviousness.

2. The Applied References Lack The Claimed Mapping

In addition to the distinguishing features discussed above, as agreed to during the Interviews, the applied references do not disclose the claimed standard patient-language cardinal symptoms are mapped to standard codes, which includes imparting a concept identifier of a standard code to each of the standard patient-language cardinal symptoms, and classifying each of the mapped patient-language cardinal symptoms according to whether a concept of the patient-language cardinal symptom exactly matches or substantially matches the imparted concept identifier of the standard code. Therefore, the applied references cannot be used to establish a prima facie case of obviousness.

For either of the foregoing reasons, claims 13 and 28, and dependent claims 14-21, which depend from claim 13, are patentable over Ross and Pories. Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection, and allow these claims.

Independent claims 24 and 29

As agreed to during the Interviews, Independent claims 24 and 29 recite features that distinguish from the applied references. For example, claim 24 recites (emphasis added):

extracting terms used in existing medical records of patients regarding cardinal symptoms of the patients;

separating the extracted terms into main concepts, concept qualifiers, and concept modifiers, wherein the main concepts are aligned on a spelling and concept basis;

selecting a plurality of terms as standard terms from the extracted terms that were separated as being the main concepts; and

storing the standard terms in a database, wherein the standard terms are stored in the database so as to be free from association with a particular medical record

...

imparting a concept identifier of a standard code to each of the standard terms; and

classifying each of the mapped standard terms according to whether a concept of the standard term exactly matches or substantially matches the imparted concept identifier of the standard code.

Claim 29 recites similar distinguishing features as claim 24, using respective language.

As tentatively agreed to during the Interviews, Ross does not disclose "extracting terms used in existing medical records of patients regarding cardinal symptoms of the patients," as recited in claims 24 and 29. Likewise, Ross does not disclose the claimed separating the extracted terms into the claimed "main concepts, concept qualifiers, and concept modifiers." Furthermore, there is no discussion in Ross of the claimed mapping the terms to standard codes, in which a concept identifier of a standard code is associated with each of the standard terms, and each of the mapped standard terms are classified according to whether a concept of the standard term exactly matches or substantially matches the associated concept identifier of the standard code.

As also tentatively agreed to during the Interviews, Pories does not cure the deficiencies in Ross. Pories does not disclose that the extracted terms are terms

"regarding cardinal symptoms of patients," as recited in claims 24 and 29. In Pories the extracted terms are not the claimed "*chief complaints*" as received from the patient. Rather, in Pories the doctor receives the chief complaint from the patient, and *based on the chief complaint*, the doctor chooses a "present illness" from available illnesses. Moreover, there is no disclosure in Pories of the claimed mapping the terms to standard codes, in which a concept identifier of a standard code is associated with each of the standard terms, and each of the mapped standard terms are classified according to whether a concept of the standard term exactly matches or substantially matches the associated concept identifier of the standard code.

Therefore, the applied references cannot be used to establish a prima facie case of obviousness.


Thus, claims 24 and 29, and claims 25-27 which depend from claim 24, are patentable over Ross and Pories. Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection, and allow these claims.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,
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